

A guide to the



Australian National Botanic Gardens

Australian National Parks and Wildlife Service

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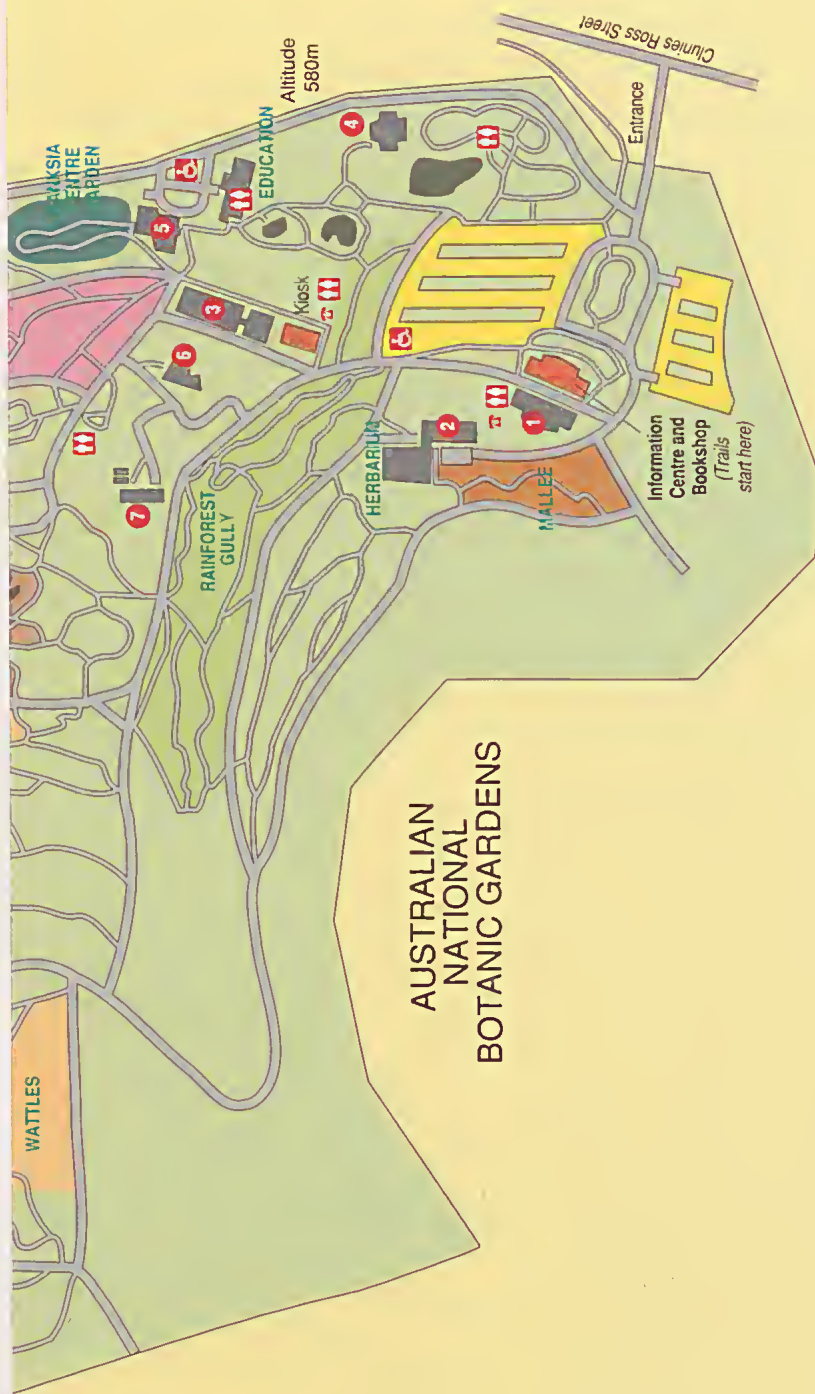
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The Rock Garden

Photo: M. Fagg
ANBG Collection





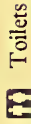
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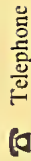
THE NATION'S GARDEN
A SHORT HISTORY
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Australian National Botanic Gardens

Key



Toilets



Telephone



Parking



Disabled Parking

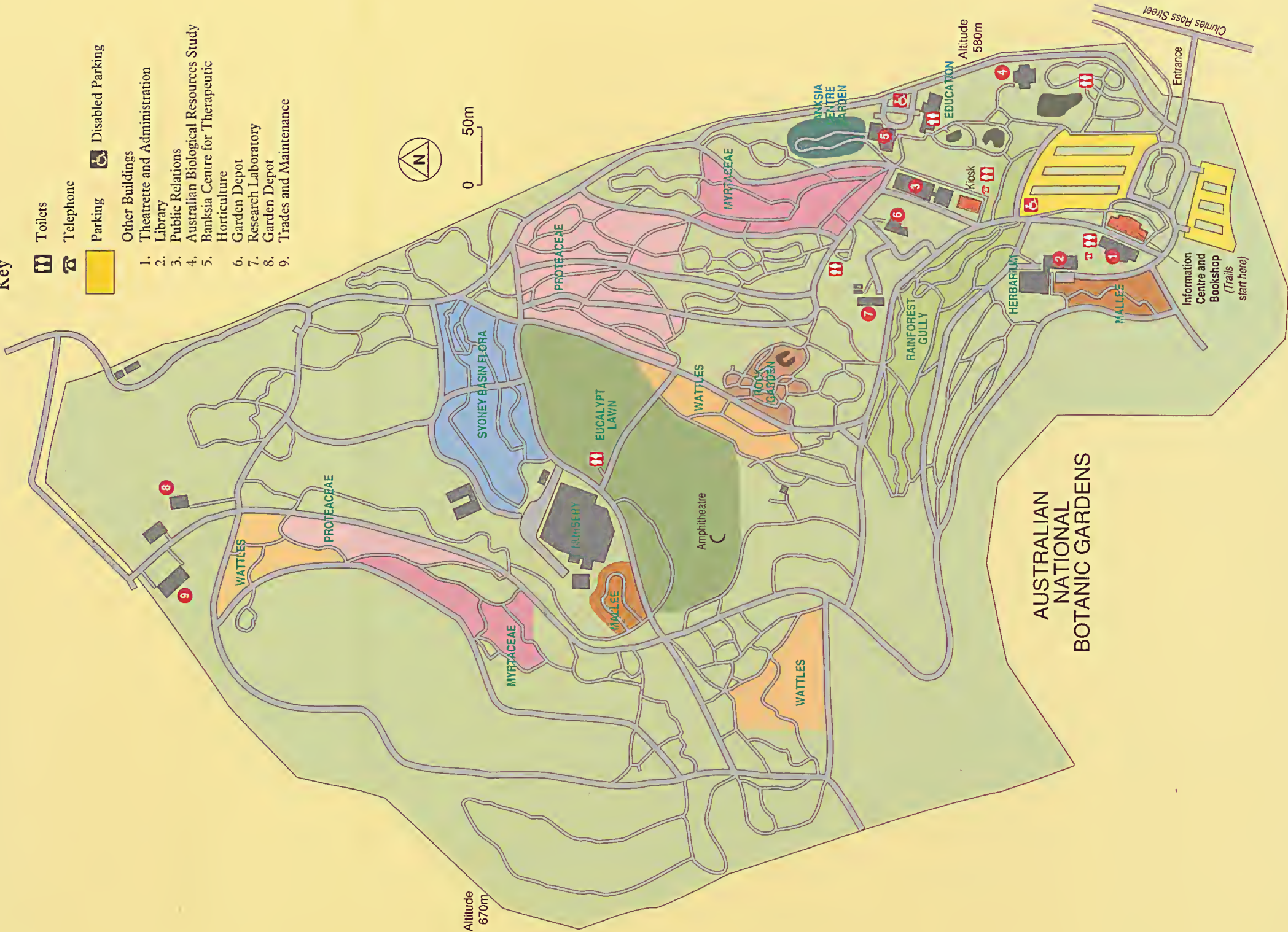
Other Buildings

1. Theatre and Administration
2. Library
3. Public Relations
4. Australian Biological Resources Study
5. Banksia Centre for Therapeutic Horticulture
6. Garden Depot
7. Research Laboratory
8. Garden Depot
9. Trades and Maintenance

Altitude
670m



0 50m



AUSTRALIAN
NATIONAL
BOTANIC GARDENS



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Australian National Botanic Gardens



AUSTRALIAN NATIONAL BOTANIC GARDENS

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The Australian National Botanic Gardens is a world-class institution, home to one of the largest herbaria in the world. It is a place of discovery, research, and conservation, where the past meets the future. The Gardens are a testament to the beauty and diversity of Australia's flora, and a source of inspiration for generations to come.

Front cover photo:
 The Park House
 © 2018



A gnarled Brittle
Gum, *Eucalyptus*
mannifera
supspecies
mannifera, at the
Gardens in
Canberra.
Photo: ANBG Collection

Australian National Botanic Gardens

Almost one third of Australia's ferns, conifers and flowering plants are grown at the Gardens.



Elkhorn fern,
Platynerium
bifurcatum.

Photo: R. Hotchkiss,
ANBG Collection

Black Cypress
Pine, *Callitris*
endlicheri.

Photo: R. Hotchkiss,
ANBG Collection



The Nation's Garden

The Australian National Botanic Gardens in Canberra and at Jervis Bay are unique places where people from around the world can experience the great diversity, colour and often spectacular beauty of Australian native plants.

The *Encyclopaedia Britannica* defines a botanic gardens as:

A site primarily intended for the study and scientific cultivation of plants. Botanical gardens also educate the public through displays and publications. They maintain herbariums (collections of preserved plant specimens) and botanical libraries, provide grounds for public enjoyment, and aid in plant conservation.

In all these respects the Australian National Botanic Gardens endeavours to achieve the highest standards and the Gardens is truly an international resource for all interested in Australian plants.

Visitors who come to enjoy and learn among the abundant plantings and pleasant walks of the Gardens have around them the largest collection of living Australian plants anywhere in the world. More than 5500 species are now in cultivation. They represent about one third of all known Australian flowering plants, conifers and ferns.

Australia is a vast country and the native flora is widely dispersed. It would be virtually impossible for the scholar or interested lay person to see most native plants in their natural habitat. For that reason, the goal of the Australian National Botanic Gardens was clear from the beginning – to bring together in one place a representative collection of living and herbarium (preserved) specimens of Australian and related plants.

The collection is used for research, education and public enjoyment. In addition, the identification, cultivation and study of endangered species play an ever-more important part in the Gardens' programs.



The Gardens are young compared to the world's long-established botanic gardens. This makes the horticultural and botanic achievements all the more impressive. Few who stroll past the profusion of mature plantings, marvel at the towering trees alive with birds, or immerse themselves in the cool beauty of the Rainforest Gully, stop to recall that less than 50 years ago both sites were cleared cattle farms on some of Australia's least fertile soils.

The Gardens today are the result of a skillful match between: specimens, cuttings and seeds collected from the wild; scientific research and plant classification; advanced techniques for propagation of living plants; and, identification and labelling using the extensive reference collection established in the herbarium.

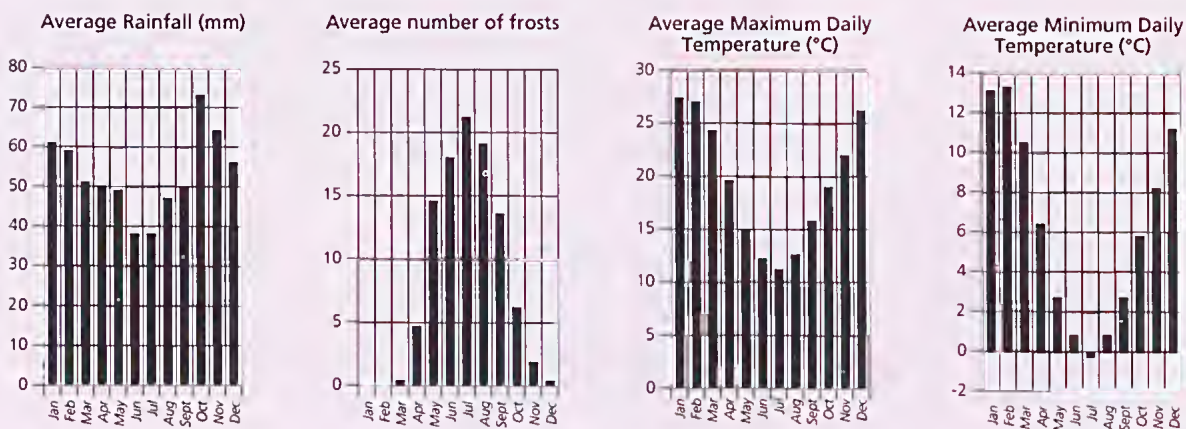
Along the way, the professionals who have guided the Gardens' development didn't forget the special recreational and educational features that help make the Gardens such a popular place to visit for a lunch hour or a day.

*Grevillea
angulata.*

Photo: R. Hotchkiss,
ANBG Collection

The Gardens at a Glance

	Canberra	Jervis Bay
Total area	90 hectares	80 hectares
Developed area	40 hectares	20 hectares
Altitude	571-677 metres	26 metres
Rainfall	664 mm	1170 mm
Soils	clay loam, clay	sand
Wettest month	October	May
Driest month	June/July	October
Winter frosts	yes	no
First Planting	1949	1951
Officially opened	1970	
Visitors (1991)	376 000	43 000
Living collection	5500 species	1400 species
Herbarium	210 000 specimens	





A Short History

Establishing the national botanic gardens in Canberra required a leap of faith and a lot of hard work on the part of many people. The chosen site on the eastern slopes of Black Mountain had been largely cleared and was in use as a dairy farm in 1935, when a

scientific report by Dr Bertram Dickson of the Council for Scientific and Industrial Research recommended that a botanic gardens be established.

The biggest challenge was Canberra's location and climate. The cold winters, featuring frosts that sometimes linger all day on southern slopes, are followed by hot dry summers marked by

FIRST TREE PLANTING IN BOTANICAL GARDEN AREA

The first tree planting in the botanical gardens area of Canberra was performed by the Prime Minister (Mr. Chifley) in the presence of delegates to the British Commonwealth Specialist Conference in Agriculture. Mr. Chifley planted a small gum tree and Sir Edward Salisbury, Director of the Royal Botanical Gardens at Kew, London, and chairman of the conference, planted a small oak tree.

Six hundred acres on the south-eastern slopes of Black Mountain and bounded by the C.S.I.R. and the National University have been set aside for the botanical gardens. The sheltered section near the mountain, 1949.

frequent strong winds. Infertile soils completed the daunting raw material that faced Canberra's Superintendent of Parks and Gardens, Dr Lindsay Pryor, in 1944.

A report on 13 September 1949 in the *Canberra Times* 'First Tree Planting in Botanical Garden Area.' heralded the beginning of the Gardens. Planting continued slowly during the 1950s and was accelerated during the 1960s. By 1970 there were about 2000 species in the living collection, work had begun on the Rainforest Gully and the herbarium had gathered 18 000 specimens.

The scientific and educational resources of the Gardens were greatly expanded during the 1960s with development of the herbarium and library in 1966, nursery and glasshouses in 1967 and the research laboratory in 1970.

Planting the first tree at the Gardens, September, 1949. Prime Minister Ben Chifley and the Director of the Royal Botanic Gardens, Sir Edward Salisbury stand beside a Brittle Gum, *Eucalyptus mannifera*. The tree can be seen near the Gardens' front gates. Photo: CSIRO

The Canberra Times announces the first tree planting at the Gardens.

In 1951 a frost-free Annexe site was selected at Jervis Bay to extend the range of species that the Gardens could cultivate. A cattle grazing operation, Bherrewerre Farm, had been operating since the turn of the century at the heart of the site next to Lake McKenzie, a natural dam formed by sand dunes. Four hundred trees were immediately planted to mark the addition of the Annexe to the Gardens.

Cattle once grazed the site of the Jervis Bay Botanic Gardens. Bherrewerre farm was established around the turn of the century.

The Rainforest Gully in 1968. The installation of a misting system in the Gully during this year helped transform it into a cool and lush display – one of the Gardens' major attractions.

Public access to the Canberra Gardens started in 1967. On 20 October 1970 Prime Minister John Gorton officially declared the Gardens open.

The Gardens' extensive photographic collection was established in the late 1960s. It now houses some 20 000 images featuring the development of the Gardens, records of field trips, and a large collection of plant portraits.

The 1960s also saw the beginning of the public information, interpretation and education services. By 1991 the Gardens had



become an outdoor learning centre for close to 10 000 students each year. The Gardens now caters for a wide range of community interests from people with disabilities to the home gardener in search of information and ideas about native plants.

The value of the Gardens to the whole country was officially recognised in 1978 with a name change to the National Botanic

Gardens and a further change in 1984 to the Australian National Botanic Gardens. The Gardens' value to the nation was further recognised when it was placed on the Register of the National Estate in 1990.

The Plant Displays

Planting Themes

In addition to decorative plantings, most plant displays are organised into taxonomic or ecological themes.

Taxonomic Displays

These displays feature closely related plants. Family displays include the Myrtaceae. This family includes the genus *Eucalyptus*, which has hundreds of species, and other genera such as *Callistemon* (bottlebrush) and *Melaleuca* (paperbark and honey myrtle). Other taxonomic plantings focus on the range of plants within one genus of a plant family. The *Acacia* (wattle) sections feature some of the 1000 species within this genus. Acacias are part of the family Mimosaceae.



Ecological Displays

These displays feature plants that grow together in similar environments. Examples are the plants in the Rainforest Gully, in different parts of the Rock

Garden, in the Sydney Basin Flora section and in the Mallee Shrublands section.

Taxonomic displays, such as the wattle sections (*Acacia* species), feature plants which are botanically related. (Inset) Mount Morgan Wattle, *Acacia podalyriifolia*, flowers in early winter.

Photos: ANBG Collection

Ecological displays such as the Mallee Shrublands section feature plants which grow in similar environments.

Photo: M. Fagg, ANBG Collection

The Canberra Gardens



The Gippsland Water Dragon, *Physignathus lesueurii howittii*, thrives among the Gardens' pools and in the lower sections of the Rainforest Gully. They are often seen sunning themselves on rocks.

Photo: R.W.G. Jenkins,
Wildscene Photographics

Plants from the rainforests of eastern Australia flourish in the moist, shady environment of the Rainforest Gully.

Photo: M. Fagg,
ANBG Collection



The Rainforest Gully

It is difficult to imagine that this site was a natural dry gully supporting eucalypts, shrubs and grasses until the late 1960s. Since then, a lush rainforest has been coaxed into life with the aid of some 2000 fine misting sprays which supply extra water and keep the humidity high.

Strategic planting of fast-growing wattles and some eucalypts associated with rainforest areas have added shelter from Canberra's frosts and cold winter nights.

The Rainforest Gully plantings represent areas along Australia's eastern coast and are arranged in roughly south to north



A new frond of the
Soft Tree-fern,
Dicksonia
antarctica.
Photo: R Hotchkiss,
ANBG Collection

Exploring the
Rainforest Gully.
Photo: Save the Bush Program



order. Tasmanian
rainforest plants are
grouped at the end of the
Gully nearest the Kiosk.
Perimeter paths and a
boardwalk in the floor of

the Gully guide visitors on
a northerly journey until
they reach plantings from
northern Queensland at the
upper end of the Gully.

Seeds and cuttings for
the Rainforest Gully were
collected from the wild.
Most have come from the
coldest part of their range,
giving them a better chance
of surviving in Canberra.
Some palms and other
species from northern
Queensland are kept in the
nursery glasshouses during
winter and are brought out
in the warmer months for
display.

Australian rainforests
still hold genetic links to
the continent's ancient
past. Hundreds of millions
of years ago Australia was
part of a super continent,
Gondwana, and was joined
to southern Africa, India,
South America and
Antarctica. The southern
beeches, *Nothofagus*
species and the conifers,
Araucaria species which
grow in Australian
rainforests were part of the
flora of this ancient
continent.

Pinkwood,
Eucryphia moorei,
is a tree associated
with rainforests in
southern New
South Wales and
eastern Victoria.
Photo: ANBG Collection

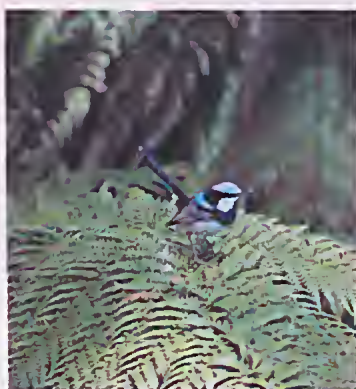


A range of soil mixes in the Rock Garden allow the cultivation of many plants which need special growing conditions. The Rock Garden is an ideal place to display small plants.

Photo: M. Fagg,
ANBG Collection

The Superb Fairy-wren, *Malurus cyaneus*, is common around the Gardens. The dense shrub cover of many of the garden beds provides excellent shelter and nesting sites. The diversity of native plants and insects and the range of habitats in the Gardens supports a great variety of birds.

Photo: G. B. Baker,
Wildlife Photography



The Rock Garden

The Rock Garden has been designed to cater for desert, alpine and small Australian plants which have special cultivation needs.

The soils consist of special mixes of composted pine bark (which has similar properties to peat) and sand. Limestone has also been added to some beds. Pockets of raised soil provide the necessary drainage. Larger rock masses store heat from the sun, which is slowly released at night, providing a more temperate environment for those plants that need it.



Top left
The Garland Lily,
Calostemma
purpureum,
flowers over the
summer months
and dies back
during the winter.
Photo: M. Fagg,
ANBG Collection

Top right
The graceful
flowers of the
Native Fuchsia,
Epacris longiflora.
Photo: R. Hotchkiss,
ANBG Collection



Bottom right
The flowers of
Pelargonium
rodneyanum add
colour to the Roek
Garden during
spring and
summer.
Photo: M. Fagg,
ANBG Collection



A watereourse provides additional ecological niehes through the Roek Garden. A dry creek bed in the arid zone becomes a damp soak. The water then gathers foree, becoming a creek leading to a dripping roek shelf, waterfall and pool. Plants associeated with these speeial environments are grown nearby.

Bottom left
Nardoo, *Marsilea*
drummondii, is a
fern which grows
in water and on
the edges of
ponds.
Photo: M. Fagg,
ANBG Collection

Here as elsewhere, the Gardens' horticultural staff monitor and fine tune the growing eonditions for the various plantings. There are always problems to solve. Many plants have never before been grown in a botaniceal colleetion.





The spectacular flowers of the Red Flowering Gum, *Eucalyptus ficifolia*.

Photo: R.Hotchkiss, ANBG Collection

The Eucalypt Lawn

Just as gum trees are central to most peoples' image of the bush, so the Eucalypt Lawn dominates the geographic centre of the Gardens. There are over 700 known species of *Eucalyptus*. Examples of 100 species tower over the lush grassy areas where relaxing and learning offer twin attractions.

Over 100 *Eucalyptus* species tower over the Eucalypt Lawn.

More recent additions to the Gardens are the mallee eucalypts from central and western Australia which have been planted in a special section next to the Lawn.

The Eucalypt Lawn and the neighbouring Burbidge Memorial Amphitheatre provide popular venues for community events, such as concerts, as well as for picnics and weddings.



The Nancy Burbidge Memorial Amphitheatre commemorates the contribution to Australian botany of Dr N. T. Burbidge (1912 - 1977)

Photo: ANBG Collection



A model Cockatoo made by school children adds interest to the Mallee Shrublands Section during an educational visit to the Gardens.

Photo: R. Hotchkiss, ANBG Collection

Mallee Shrublands

An important educational goal of the Gardens is to help Australians learn more about local ecosystems. Despite greater public appreciation of the unique Australian flora, a lot is still being dismissed as 'scrub' of little value.

Such has been the fate of the mallee country of the semi-arid south. Extensive clearing of shrublands for farming has resulted in some mallee ecosystems and the animals that live there, such as the Malleefowl, *Leipoa ocellata*, becoming rare.

Mallee is an aboriginal name for multi-stemmed species of *Eucalyptus*. They are adapted to a climate featuring short winters, with an unreliable wet season, and long, hot dry summers. Mallee trees are distinguished by large woody rootstocks (lignotubers) which regenerate quickly after fire.

The flowers of *Leptosema daviesioides* form near the ground to allow pollination by small marsupials.

Photo: M. Crisp, ANBG Collection





While a sea of mallee shrubland may look monotonous to the casual eye, it is in fact a dynamic ecosystem with varied understorey plants and spring-flowering annuals.

The Gardens have established groups of shrubland plantings representing mallee from Western through South Australia into Victoria. Special mixes of soil and good drainage offer the plants the best growing conditions.

Mallee eucalypts, such as the Bell-fruited Mallee, *Eucalyptus preissiana*, often have spectacular flowers.

Photo: R. Jackson,
ANBG Collection



The Mountain Devil, *Lambertia formosa*. Its fruits resemble the horned head of a devil and are a favourite of children visiting the Gardens.

Photo: M. Fagg,
ANBG Collection



Left
Tall flower spikes
of the Gymea Lily,
Doryanthes
excelsa, attract
many nectar-
feeding birds.
Photo: R. Hotchkiss,
ANBG Collection



Right
The River Rose,
Bauera rubioides,
bears flowers for
most of the year.
Photo: M. Fagg,
ANBG Collection



Sydney Basin Flora Section

The sandstone dominated Sydney Basin extends from Nowra, on the New South Wales south coast, to the Blue Mountains north-west of Sydney. This area supports one of the most rich and diverse floras of the world.

The Sydney Basin Flora section is still under development, however, many species, including the Gymea Lily, *Doryanthes excelsa* and Willow-leaved Crowea, *Crowea saligna*, have already been established.

A Waratah,
Telopea
speciosissima,
flowers along one
of the paths of the
Sydney Basin
Flora Section.

Photo: R. Hotchkiss,
ANBG Collection



The Button
Wrinklewort,
*Rutidosia
leptorrhachoides*,
was once
widespread in
Victoria and in the
Canberra region.
Clearing for
pasture land and
competition from
weeds now
threaten its
existence.

Photo: M. Fagg,
ANBG Collection

Endangered Species

Botanic Gardens throughout the world have an important role to play in the conservation of endangered species. The Australian National Botanic Gardens has taken a leading role in preserving endangered native plants by learning about their propagation and cultivation.

The ultimate goal of endangered species conservation is to conserve the species in the wild. Through its successful propagation work, the Gardens provides other agencies with the material and expertise to assist in the possible re-introduction of endangered species into the wild.

A recent Australia-wide study has classed 200 plants as 'endangered' (in imminent danger of extinction). Close to half of these have been brought into cultivation at the Gardens in Canberra and Jervis Bay.

Together with other conservation agencies, the Gardens is also co-ordinating a national information network on endangered plants and on locations where they are being cultivated.

Pink Pimelea – at Risk!

The Pink Pimelea, *Pimela spicata*, is an unassuming native of coastal headlands in northern NSW and of the Cumberland Plain in Western Sydney.

The small spreading plant with its tiny white or pink flowers is now found in only a few remaining locations in NSW. Its habitat has been destroyed elsewhere by road building, housing developments and other human activities.

Pink Pimelea is now successfully in cultivation at the Gardens and is used as part of an education program on endangered species.



Collecting
Swainsona recta
as part of the
Garden's concern
for this threatened
species.

Photo: Peter Ollerenshaw,
ANBG Collection

The Jervis Bay Gardens

Spring is one of the best times to visit the Jervis Bay Botanic Gardens where cultivated plantings flourish side by side with naturally-occurring bush and heathland. The aptly named Christmas Bush, *Ceratopetalum gummiferum*, and Pink Swamp heath, *Sprengelia incarnata*, are among the local plants that flower in spring and early summer.





Jervis Bay is also the place to see frost-sensitive plants which cannot be cultivated in the open at Canberra. Vireya rhododendrons from Papua New Guinea, collected as part of the Gardens' interest in plants related to the Australian flora, are also cultivated. A range of rainforest species thrive in the Gardens' Rainforest Gully. Palms and ferns are a particular feature here.

Notable also is the abundance of native orchids. They are of several types: ground orchids (terrestrial) and those that grow on other surfaces such as rocks (lithophytic) and on other plants (epiphytic).

The Rainforest Gully at the Jervis Bay Botanic Gardens.

Photo: R. Steininger, ANBG Collection

(Inset) Hollows in the tree trunks around the bushland parts of the Gardens provide excellent shelter for the Sugar Glider, *Petaurus breviceps*. These small mammals glide from tree to tree in search of sugary sap. The scratches made by Sugar Gliders can be seen on the trunks of some trees.

Photo: G. B. Baker, Wildlife Photography



Lake Mc Kenzie
from the Lake
Trail.

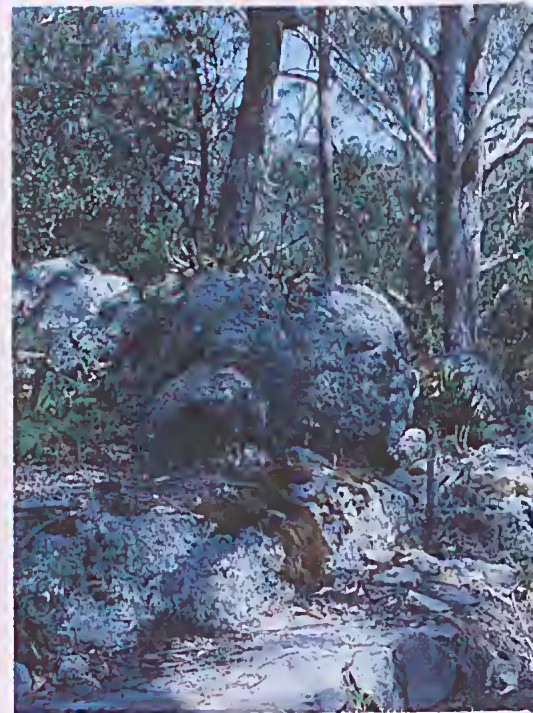
Photo: ANBG Collection

Sandstone
outcrops
throughout the
Gardens support a
fascinating variety
of lichens, mosses,
ferns and orchids.

Photo: R. Hotchkiss,
ANBG Collection

Some, such as the Rock
Orchid, *Dendrobium
speciosum*, occur naturally
here. They are easily
spotted on sandstone
outcrops, often next to
mosses and lichens. The
range of naturally-
occurring mosses, lichens
and liverworts is itself a
special part of the Jervis
Bay Botanic Gardens.

The central feature of
the Annexe is Lake
McKenzie, a natural lake
formed by rising sand
dunes. The lake provides
much of the water for the



Gardens and attracts a
variety of birds, mammals
and even tortoises. The
water is very dark, stained
by centuries of
accumulated tannin from
decaying vegetation. Light
cannot penetrate far below
the surface so the lake is
very cold and does not
support fish life.

Walking trails wind
through naturally-occurring
heath and woodland both
south and east of the Lake.
Ground orchids, grass
trees, banksias, hakeas and
coastal eucalypts are
interesting features along
the way.



Grass trees, *Xanthorrhoea* species, are common along the Nature Trail.
Photo: R. Steininger, ANBG Collection



Natural heathland is a mass of colour in spring – and a special feature of the Jervis Bay Botanic Gardens.

Photo: M. Fagg, ANBG Collection



The Rock Orchid, *Dendrobium speciosum*, is one of a number of orchids which grow naturally, or are cultivated, at the Gardens.

Photo: R. Hotchkiss, ANBG Collection

Grassed areas, as well as a picnic shelter overlooking the lake, encourage visitors to relax and stay longer. Those who do are likely to find rosellas inviting themselves to lunch and kookaburras swooping down for insects or laughing in a tree not far away.

Behind the Scenes



On most collecting trips, cuttings or seeds are collected to grow plants for the Gardens, while a matching flowering specimen is collected to be preserved in the Herbarium.

Oxylobium ellipticum growing at the Gardens.

Photo: R. Hotchkiss, ANBG Collection.

A herbarium specimen of *Oxylobium ellipticum*.

Photo: M. Fagg, ANBG Collection

The Herbarium

Some 210 000 pressed, dried plant specimens housed in the Gardens' herbarium provide a vital research and reference collection. Staff use herbarium specimens to accurately identify and label the living plants in the Gardens. Numbers on the plant labels link each living plant to an herbarium specimen.

There are 140 000 herbarium specimens of flowering plants and ferns and about 70 000 of the less-well studied mosses, lichens and liverworts (cryptogams). The collection of cryptogams is the second largest in the southern hemisphere and is the core of the Gardens' research program into these plants.



Each species is represented by a set of specimens collected from different locations. Over time, these provide a more complete picture of the species' geographical range, ecology and degree of variation.



Properly-prepared herbarium specimens in a climate-controlled environment can remain in good condition for over 500 years.

Top left
Herbarium specimens are stored in movable units in a climate controlled environment.
Photo: ANBG Collection

Preparing a typical herbarium specimen starts with a field trip. A suitable flowering and fruiting section of plant is selected and pressed between sheets of absorbent paper. The researcher takes extensive notes on the habitat of the plant. On most trips cuttings or seeds of the same plant from which herbarium specimens are taken are collected for the living collection.

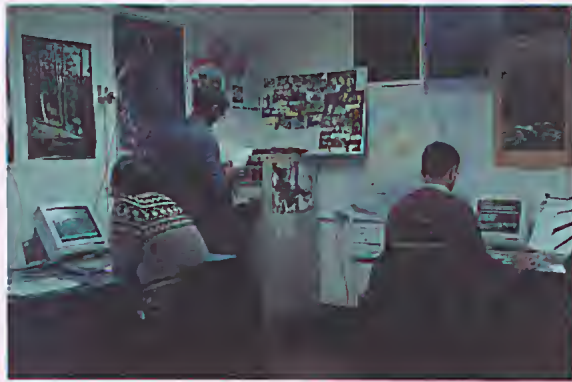
After further drying and mounting on acid-free paper the specimen is labelled with its scientific name and details of the site from which it was collected. It is then filed in the herbarium's specialised storage vaults, for use by the scientific community.



Top right
Flowering specimens are collected on field trips to be preserved in the Gardens' Herbarium.
Photo: I. Telford, ANBG Collection

The Herbarium is opened to the public during special events.

Photo: R. Hotchkiss, ANBG Collection



Detailed information about the names and origins of living plants and herbarium specimens are stored on a specially designed computer database.

Photo: R. Hotchkiss, ANBG Collection

Research into the classification and biology of Australian and related plants is an important part of the work of the Gardens. Orchids are a special research interest.

Photo: R. Hotchkiss, ANBG Collection



Computer Records

Detailed records of herbarium specimens, living plants and photographs are stored on a computer database. The database is known as the Integrated Botanical Information System (IBIS). Its design helps link information about the herbarium collection, the living collection and the photographic collection. This avoids duplication of record keeping and provides an enormous amount of information to people using any of the Gardens' collections.

Botanical Research

Research at the Gardens is concerned with the classification and biology of Australian and related plants. The living and herbarium collections also provide research opportunities for Australian and overseas scientists interested in the diversity of plant life.

Scientists at the Gardens have several main research interests. These include orchids (family *Orchidaceae*), and cryptogams (mosses, lichens and liverworts), particularly, the moss family *Meteoriaceae*.

One aspect of research into orchids has concentrated on developing techniques for growing ground-dwelling (terrestrial) orchids from seed. This is closely linked to conservation efforts. The Gardens' scientists have succeeded in unravelling a complex relationship between the orchids and fungi that help the orchid seeds to germinate. As a result of this research, terrestrial orchids are successfully being grown 'in captivity' for the first time, an achievement of international significance.

The Gardens' scientists and other professional staff regularly contribute to national and international forums at the forefront of botanic and horticultural knowledge and education. They also provide technical assistance to other botanic gardens and conservation organisations.

The Library

The Gardens' specialist Library supports requests from staff and visitors. The collection includes books, maps, reprints, journals and certain rare books and art works on botanic and horticultural themes.

Most of the plants for the Gardens are propagated at the Nursery. They are planted in the open in Spring and Autumn.

Photo: R. Hotchkiss, ANBG Collection

Re-potting cuttings in the Gardens' Nursery. Many of the species propagated have not been successfully cultivated before they are grown at the Gardens.

Photo: R. Hotchkiss, ANBG Collection



The Nursery

The nursery has been called the heart of the living collection. Most plants for the Gardens are propagated here.

Horticultural staff take three to four field trips every year. Cuttings, seeds

or plants collected in the field add to particular parts of the collection such as the Rainforest Gully or Rock Garden. They also provide specimens for research and increase the number of threatened species brought into cultivation.



Some 5000 new plants are grown each year to replace or add to parts of the living collection.

Young plants grow in special composted pine bark and sand mixtures which have been steam-sterilised to minimise the chance of fungal infection. Each species is identified through the herbarium and each plant is carefully labelled with a registration number matching the

which are unlikely to survive in the open ground, are kept in pots special storage bays.

Plant Labels

Horticultural staff do a health checkup and survey the location of all the plants in both Gardens each year. If necessary, labels are updated for scientific accuracy at the same time.

Frost sensitive plants are grown in the the Nursery glasshouses. These are opened to the public during special events.

Photo: R. Hotchkiss, ANBG Collection

Collecting plants to grow at the Gardens can involve travel through difficult country, as in this trip to northern Queensland.

Photo: I. Telford, ANBG Collection



Plants in the Gardens are labelled with an up-to-date scientific name. The plant records staff also monitor the health of the collection.

Photo: R. Hotchkiss, ANBG Collection

Cuttings and seeds from the field trips are rushed to the nursery where the propagation skills of the staff come into play to minimise any loss. Eighty per cent of the plants grown in the Gardens are propagated from cuttings.

herbarium specimen, before being planted out in the Spring or Autumn.

Plants that need special climatic conditions to survive are kept in nursery glasshouses most of the year. These include warm-temperate and tropical rainforest palms and ferns. Other plants which are difficult to propagate, or



The Gardens and the Community



Banksias are a favourite source of nectar for the Red Wattlebird, *Anthochaera carunculata*.

Photo: K. Thaler,
ANBG Collection

The Gardens and the Community

The Gardens' education programs aim to encourage young people to appreciate the beauty and diversity of Australian plants.

Photo: J. Foster,
ANBG Collection

Almost half a million people from Australia and overseas visit the Canberra Gardens every year. They come to learn and to enjoy. The Gardens places great emphasis on making one as accessible as the other.

Education

Thousands of students at all levels learn about plants at the Gardens each year. The Gardens' Education Service also provides materials to visiting teachers and others throughout Australia. Workshops on using the Gardens and exploring the fascinating world of Australian plants are conducted for teachers and the wider community. Displays, publications about plants and explanatory signs are also produced as part of an effort to extend community knowledge of Australia's flora.



Visitor Information Centre and Bookshop

The Visitor Information Centre is usually the first port of call on a visit to the Canberra Gardens. Exhibitions on special themes, leaflets on the

gardens, information on native plants and a well-stocked bookshop are all found here. The Public Access Herbarium is available for those who wish to identify plants from the ACT and NSW south coast region.

Displays on themes related to the Australian environment are held at the Visitor Information Centre and changed from time to time.

Photo: R. Hotchkiss,
ANBG Collection.



Opposite page
The beautiful surrounds of the Gardens provide an inspiration for people of all ages.

Photo: R. Hotchkiss,
ANBG Collection



The Kiosk

The Kiosk provides a popular lunch venue for Canberrans and out-of-town visitors who appreciate the excellent food and even better surroundings.



The Banksia Centre

The Banksia Centre conducts a popular and innovative therapeutic horticulture program for older people and those with disabilities.



The Centre and its garden is designed to allow people to join in the experience of growing plants. Some the garden sections were planted by people with disabilities. The sections include areas dedicated to coloured, scented, textured and bird-attracting Australian plants.

Raised beds in an outdoor gardening area allow people with disabilities to grow vegetables and flowers from standing, sitting or kneeling positions.

Special education programs have modified plant growing activities for students at both the primary and highschool level.

The Banksia Centre also provides people with the opportunity to grow and care for plants as an aid to physical rehabilitation.

Young people with disabilities are given work opportunities to decide whether horticulture might be a vocation for them. Centre professionals also offer advice and assistance to people in the community.



Left
The Gardens' Kiosk and surrounds are an excellent venue for refreshments.

Photo: R. Hotchkiss, ANBG Collection

Right
The Banksia Centre conducts therapeutic horticulture programs for people with disabilities.

Photo: M. Fagg, ANBG Collection

Raised beds make gardening more accessible for everybody.

Photo: ANBG Collection



The Friends of the Gardens organise an active program of events, including plant sales, for their members and the community.

Photo: M. Fagg,
ANBG Collection

Trained volunteer guides escort thousands of visitors around the Gardens each year.

Photo: R. Hotchkiss,
ANBG Collection

Friends and Volunteers.

The Friends of the Australian National Botanic Gardens provide an active support group. Members aim to increase community

awareness of the scientific, educational, recreational and conservation functions of the Gardens. Many also give of their time as volunteer guides and to organise special events and plant sales.



Australian Hittites
 (Darius, c. 500 BC, Darius II, c. 400 BC)





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organization that
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During the early evening of the warmer months of the year Gould's Long-eared Bat, *Nyctophilus gouldi*, fly from their roosts to feed on insects. The bats hibernate during winter.

Photo: G. B. Baker, Wildlife Photography

